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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,116	09/18/2003	Scott Sibbett	ITL.0843US (P14804)	8422

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EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,116	SIBBETT ET AL.	
	Examiner	Art Unit	
	Joseph C. Rodriguez	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-16, 21 -23 and 26-30 is/are rejected.
- 7) ☒ Claim(s) 24 and 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/14/03</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group II, claims 11-16 and 21-30 in the reply filed on 8/29/05 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-15, 21-23, 26-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ramsey (US 5,858,195).

Regarding claims 11-15, Ramsey (Fig. 1, 30) teaches a method comprising forming a first particle separating channel (from reservoirs 12G, 14G, 16G or 18G towards point 40G) and a second particle separating channel (34G), said second particle separating channel transverse to said first particle separating channel and in communication therewith (Fig. 30);

and disposing at least two spaced apart first electrodes in said particle separating channels to maintain a first bias potential in said first particle separating channel, one of said first electrodes disposed in said first particle separating channel (col. 6, ln. 60-col. 9, ln. 16; col. 30, ln 44 et seq.). Here, Ramsey teaches using electrokinetics to transport charged particle fluid via electric potentials by placing

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electrodes within respective reservoirs (e.g., 12G, 14G, 18g, 20G), thus as a reservoir is regarded as a channel start or ending point the electrodes can be regarded as disposed within the respective channels and as creating the various claimed bias potentials (Id.). Ramsey further teaches disposing a sieving media in said second particle separating channel (col. 30, ln. 14 et seq. teaching use of sieving medium such as cellulose or polyacrylamide).

Regarding claims 21-23, 26-28, 30, Ramsey teaches the claimed method steps during a DNA and enzyme (i.e., protein) analysis (Fig. 30, 31; col. 30, ln. 4-col. 34, ln. 28 teaching use of electrodes to move charged particles through a first channel, 12 or 14, and into a separation channel, 34, and the use of dye to detect DNA after sieving step with Fig. 32 showing application of linear gradient during charged particle manipulation through channels).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsey in view of Dumas (US 2004/0118688).

Ramsey as set forth above teaches all that is claimed except for expressly teaching disposing a conductivity detector in said second particle separating channel for

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detecting charged particles. Dumas, however, expressly teaches that using a conductivity detector is one of many art recognized equivalents to the dye staining taught by Ramsey that is used to detect proteins within a separation channel (para. 17). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Ramsey with the conductivity detector taught by Dumas as this feature is an art recognized equivalent. See MPEP 2144.06.

Allowable Subject Matter

Claims 24 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584**. Further, the supervisor's contact information is Donald Walsh, 571-272-6944.

Signed by Examiner Joseph Rodriguez

jcr

December 5, 2005

A handwritten signature in black ink, appearing to be 'JR' followed by a long, sweeping horizontal stroke.